Ordering number : ENN7527

NPN Triple Diffused Planar Silicon Transistor

2SD2689LS

Color TV Horizontal Deflection Output Applications

Features

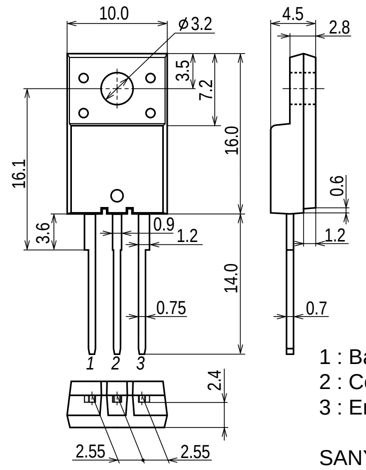
- High speed.
- High breakdown voltage(V_{CBO}=1500V).
- High reliability(Adoption of HVP process).
- Adoption of MBIT process.

Package Dimensions

unit : mm

2079D

[2SD2689LS]



1 : Base
2 : Collector
3 : Emitter

SANYO : TO-220FI(LS)

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		1500	V
Collector-to-Emitter Voltage	V_{CEO}		700	V
Emitter-to-Base Voltage	V_{EBO}		5	V
Collector Current	I_C		10	A
Collector Current (Pulse)	I_{CP}		25	A
Collector Dissipation	P_C		2.0	W
		Tc=25°C	35	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		–55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings min	Ratings typ	Ratings max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB}=800V, I_E=0			10	µA
Collector Cutoff Current	I_{CES}	V_{CE}=1500V, R_{BE}=0			1.0	mA
Collector Sustain Voltage	V_{CEO}(sus)	I_C=100mA, I_B=0	700			V
Emitter Cutoff Current	I_{EBO}	V_{BE}=4V, I_C=0			1.0	mA

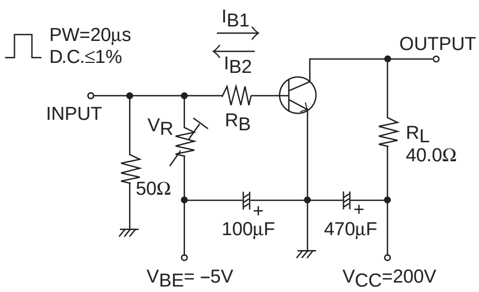
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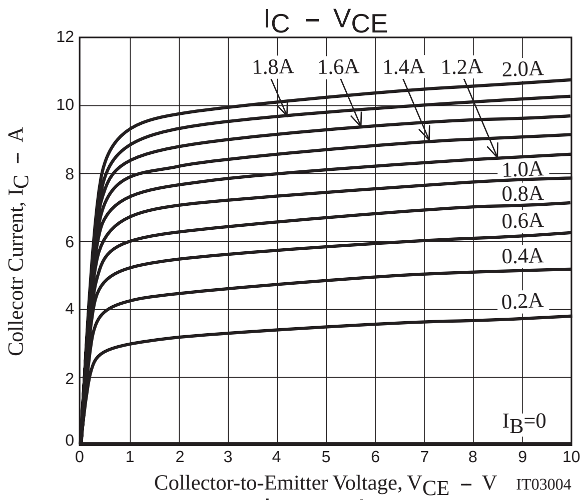
SANYO Electric Co.,Ltd. Semiconductor Company
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

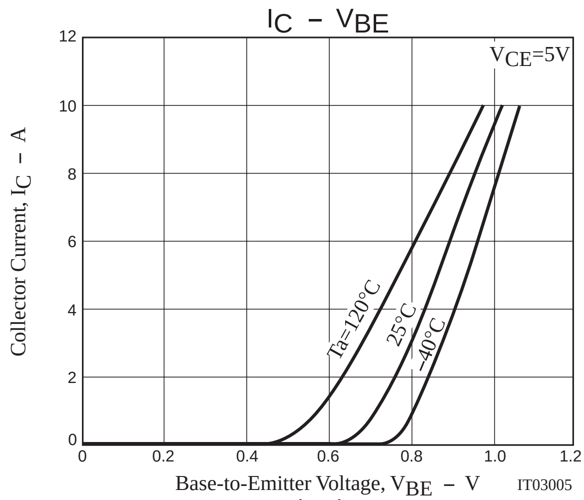
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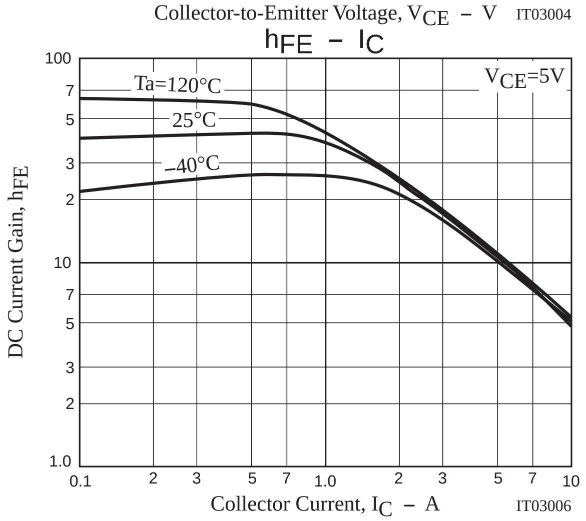
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	V_{CE}(sat)	I_C=7.2A, I_B=1.44A			3	V
Base-to-Emitter Saturation Voltage	V_{BE}(sat)	I_C=7.2A, I_B=1.44A			1.5	V
DC Current Gain	$h_{FE}1$	V_{CE}=5V, I_C=1A	15			
	$h_{FE}2$	V_{CE}=5V, I_C=8A	5		8	
Fall Time	t_f	I_C=5A, I_{B1}=1A, I_{B2}=−2A			0.3	µs

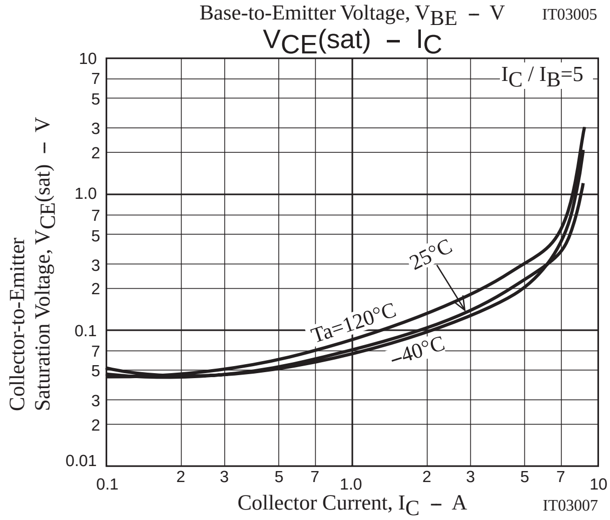
Switching Time Test Circuit



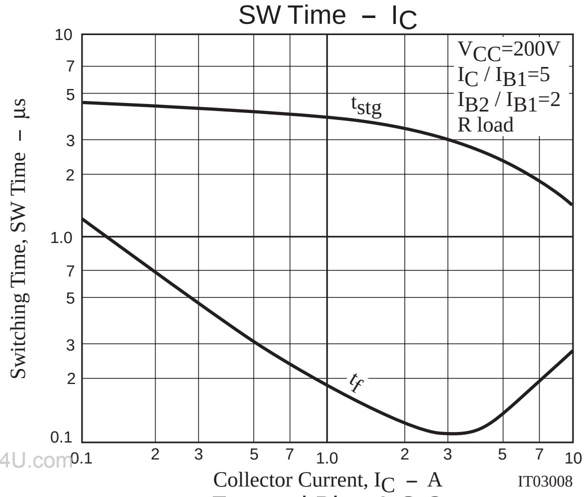




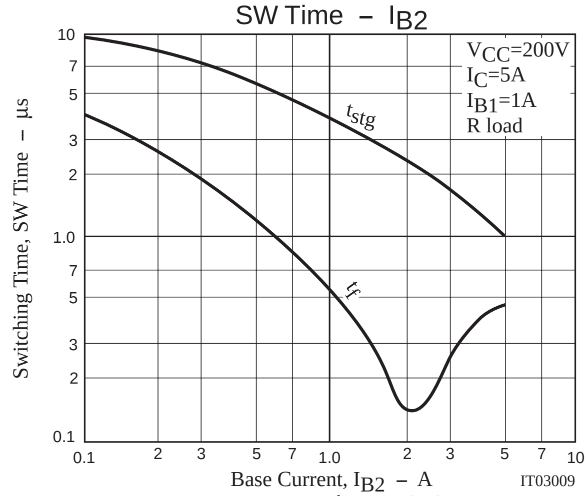




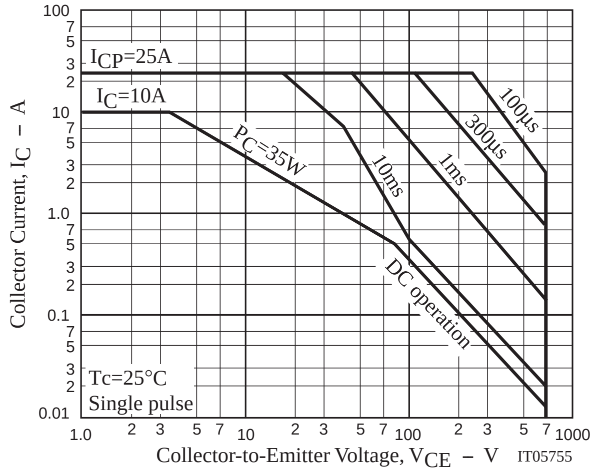
SW Time – I_C



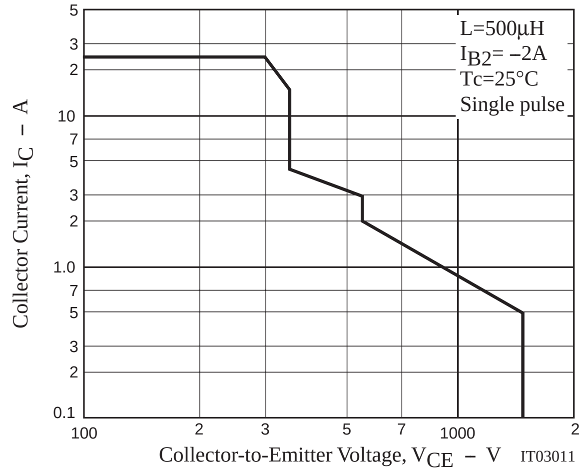
SW Time – I_{B2}



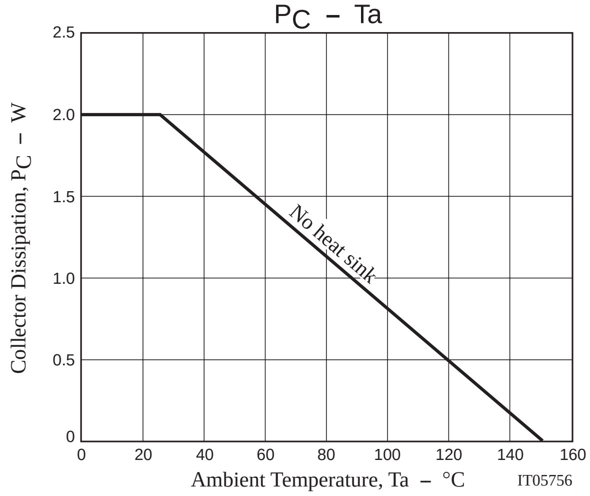
Forward Bias A S O



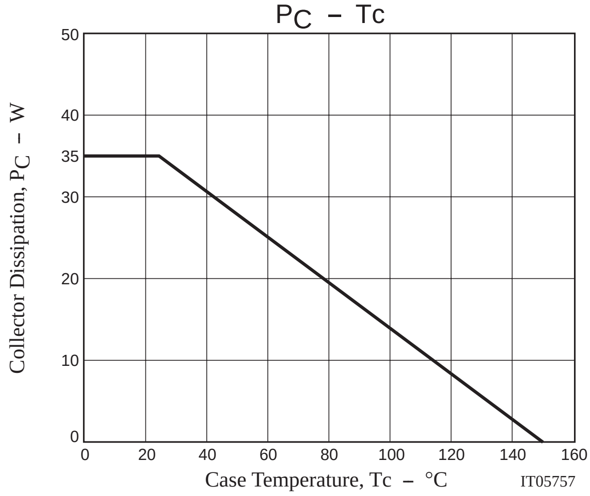
Reverse Bias A S O



P_C – Ta



P_C – Tc



This catalog provides information as of February, 2004. Specifications and information herein are subject to change without notice.